

Fig. 1

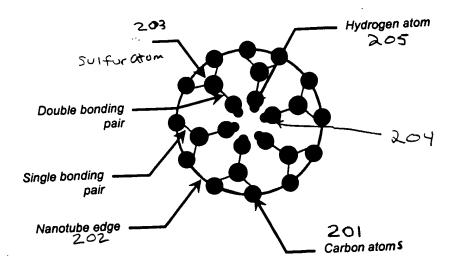


Fig. 2A

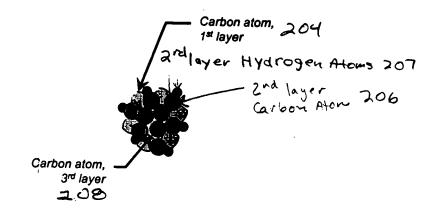
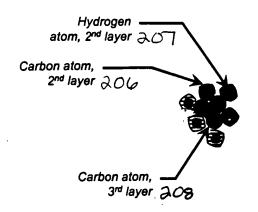


Fig. 2B



Figac

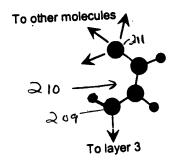


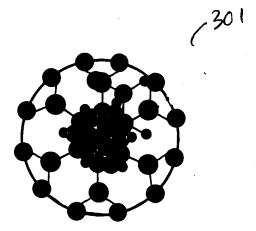
Fig. 2D

To other molecules

To remainder of nanotube

Completed molecule, side view  $C_{19}S_6H_{24}$ 

Fig. 3A



Completed molecule, top view  $C_{19}S_6H_{24}$ 

3 B

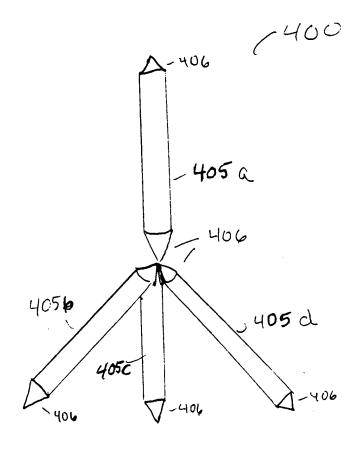


Fig. 4

Create Slabs of a composite
Polymer incorporating 3D nanotule
Structures.

Place a series of wires
between the slabs in a
Stack.

Chemically bond the stack
of slabs.

The slabs and remove
to form the fluid channels
of the microchannel device.

Fig. 5